(Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of (alkyl) (amino) triazolopyrimidines as agricultural fungicides)

RN 691005-18-2 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 6-cyclopentyl-5-methyl-7-(4-methyl-1-piperidinyl)- (9CI) (CA INDEX NAME)

RN 691005-19-3 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidin-7-amine, 6-cyclopentyl-N-[(1R)-1,2-dimethylpropyl]-5-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 691005-20-6 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidin-7-amine, 6-cyclopentyl-5-methyl-N-[(1R)-2,2,2-trifluoro-1-methylethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 691005-21-7 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidin-7-amine, 6-cyclopentyl-5-methyl- (9CI) (CA INDEX NAME)

RN 691005-22-8 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidin-7-amine, 6-cyclopentyl-N,5-dimethyl- (9CI) (CA INDEX NAME)

RN 691005-23-9 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidin-7-amine, 6-cyclopentyl-5-methyl-N-[(1R)-1,2,2-trimethylpropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
AN
     2004:412948 CAPLUS Full-text
DN
     140:423679
TI
     Preparation of 5-alkyl-7-aminotriazolopyrimidines as agricultural
     Tormo i Blasco, Jordi; Blettner, Carsten; Mueller, Bernd; Gewehr, Markus;
IN
     Grammenos, Wassilios; Grote, Thomas; Gypser, Andreas; Rheinheimer,
     Joachim; Schaefer, Peter; Schieweck, Frank; Schwoegler, Anja; Ammermann,
     Eberhard; Strathmann, Siegfried; Schoefl, Ulrich; Stierl, Reinhard
PA
     BASF Aktiengesellschaft, Germany
SO
     PCT Int. Appl., 37 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     German
FAN.CNT 1
                         KIND
                                DATE
                                            APPLICATION NO.
                                          WO 2003-EP12277
     WO 2004041825
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     BR 2003015780
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                                            BR 2003-15780
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                          Α
     EP 1585747
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     EP 1585747
                          B1
                                20060913
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     CN 1711263
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     AT 339421
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OS'

GI

US 2005272749

PRAI DE 2002-10252261

WO 2003-EP12277

MARPAT 140:423679

A1

Α

W

Title compds. [I; R1, R2 = H, alkyl, alkenyl, alkynyl, haloalkyl, cycloalkyl, Ph, naphthyl, 5-6 membered (saturated) (aromatic) heterocyclyl; or NR1R2 = 5-6 membered heterocyclyl, etc.; R3 = (substituted) C3-14 cycloalkyl, C6-14 bicycloalkyl; X = C1-6 alkyl, C1-2 haloalkyl], were prepared Thus, 5-methyl-6-cyclopentyl-7-chloro-1,2,4-triazolo[1,5-a]pyrimidine (preparation given) was stirred with a solution of 4-methylpiperidine, Et3N, and CH2Cl2 for 16 h at 20°-25° to give 5-methyl-6-cyclopentyl-7-(4-methylpiperidin-1-yl)-1,2,4-triazolo[1,5-a]pyrimidine. The latter at 250 ppm gave 100% control of Alternaria solani.

US 2005-531981

20050420

IT 691005-18-2P 691005-19-3P 691005-20-6P
691005-21-7P 691005-22-8P 691005-23-9P
RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN

20051208

20021107

20031104

ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN L14

AN 1948:33759 CAPLUS Full-text

DN 42:33759

OREF 42:7178h-i,7179a-i,7180a-i

Stabilizers for photographic emulsions

Heimbach, Newton; Kelly, Walter, Jr. IN

PA General Aniline & Film Corp.

DT Patent

LΑ Unavailable

FAN.CNT 1

APPLICATION NO. PATENT NO. KIND DATE DATE ____ ----------PΙ US 2444605 19480706 US 1945-635334 19451215

GI

For diagram(s), see printed CA Issue. AB Light-sensitive Ag halide emulsions are stabilized by hydroxy-1,3,4triazaindolizines (I) obtained by the condensation of a β -keto ester, a malonic acid ester, or a mononitrile of a malonic acid ester with an aminotriazole. In I R is H, alkyl, alicyclic, aryl, or heterocyclic, R' is H, alkyl, alicyclic, aryl, or a heterocyclic radical of the same value as R, and R'' is either NH2, OH, carbalkoxy, alkyl, or an alicyclic or heterocyclic radical of the same value as R. When R and R' are H, R'' must be a radical other than alkyl. I is prepared by refluxing 1 mol. of the β -keto ester, malonic ester, or mononitrile of a malonic ester with 1 mol. 3-amino-1,2,4triazole at reflux temperature in the presence of a solvent, e.g., glacial AcOH, 3-8 hrs.; during the treatment H2O and alc. are formed. As the condensation proceeds the final product either ppts. from solution during the reaction or is removed by diluting the solvent with H2O, EtOH, etc. Suitable β -keto esters are acetoacetic ester, malonic esters and mononitriles are di-Me malonate, Et cyanoacetate, and 5-amino-1,2,4,1H-triazoles are 5-amino-3methyl-1,2,4,1H-triazole, etc. The following 1,3,4-triazaindolizines have been prepared: 7-hydroxy-6-ethyl-5-methyl (II); 7-hydroxy-6-ethyl-2,5-dimethyl; 7hydroxy-5-methyl-2-phenyl; 7-hydroxy-2-methyl-5-phenyl; 7-hydroxy-5-phenyl (III); 7-hydroxy-2,5-diphenyl; 7-hydroxy-2-isopropyl-5- methyl; 7-hydroxy-2,5dimethyl; 5,7-dihydroxy; 7-hydroxy-5-amino; 7-hydroxy-5-carbethoxy; 7-hydroxy-5-(3-pyridyl) (IV); 7-hydroxy-2- cyclohexyl-5-methyl; 7-hydroxy-2-(2-furyl)-5methyl; 7-hydroxy-5- cyclohexyl; 7-hydroxy-6-cyclohexyl-5-methyl; 7-hydroxy-6-(2-furyl)-5- methyl; 7-hydroxy-5-methyl-6-phenyl. In preparing an emulsion with stabilizers, a solution of the stabilizer in a solvent, e.g., alc. or alc.-H2O, pH 7.5-10, is made and the solution mixed with the emulsion during ripening or prior to coating in concns. of 25-500 mg. per 1. of emulsion. Testing of stabilizers used in the following examples consists of coating 2 film strips, e.g., cellulose acetate, with the same emulsion, one with and one without a stabilizer, storing the emulsions in an incubator for 6 days at 50°, then processing in the usual way. The fog d. in the unexposed areas in the emulsions is measured in a transmission densitometer. A gelatin-bromoiodide emulsion without stabilizer gave a fog d. of 0.28 while another film coated with the same emulsion containing an addition of 100 mg. IV per 1 l. emulsion equivalent to 50 g. Ag halide, gave a fog d. of 0.08; an equivalent quantity of III substituted for IV gave the same results; 75 mg. II substituted for 100 mg. IV gave a fog d. of 0.1. Emulsions containing these stabilizers not only reduce fog produced by incubation or by long storage, but also diminish or eliminate changes of speed to which some emulsions are susceptible. Stabilizers are used in orthochromatic, panchromatic, nonsensitized, and x-ray emulsions. If used with sensitizing dyes they are added to the emulsion before or after the dyes are added. Dispersing agents for Ag halides are gelatin or H2O-soluble cellulose derivs., e.g., hydroxyethylcellulose. Stabilizers are employed in gelatin or other colloid, e.g., polyamides, as an under- or overcoat for the emulsion or as backing layer for the support. They may be incorporated in the support for the sensitive emulsion layer or in an

intermediate layer between the sensitive emulsion layer and the support, such as the baryta coating used in photographic papers, or incorporated in a protective layer coated on the emulsion surface, or the finished photographic material may be bathed in an alc. or alc.-H2O solution containing the stabilizer. In U.S. 2,444,606, I are obtained by the condensation of a β -keto or β -imino nitrile with a 5-amino-1,2,4,1H-triazole; R and R' are H, alkyl, alicyclic, aryl, or a heterocyclic radical, and R'' is either alkyl, alicyclic, aryl, or a heterocyclic radical of the same value as R. Suitable β -keto nitriles are acetylacetonitrile and β -imino nitriles, β iminobutyronitrile. As condensation between the β -keto or β -imino group and the primary amino group of the 5-amino-1,2,4,1H-triazole proceeds the final product either ppts. or is removed by diluting the solvent with H2O, EtOH, or Me2CO. The following 1,3,4-triazaindolizines have been prepared: 7-amino-5methyl (V); 7-amino-5-phenyl (VI); 7-amino-5-methyl-2-phenyl (VII); 7-amino-6ethyl-5-methyl; 7-amino-5-methyl-6-phenyl; 7-amino-2-(2-furyl)-5- methyl; 7amino-5-(3-pyridyl); 7-amino-2,5-dimethyl; 7-amino-2-cyclohexyl- 5-methyl; 7amino-5-cyclohexyl; 7-amino-5-methyl-6-(3-pyridyl); 7-amino-5-methyl-6cyclohexyl. The same testing procedures as in U.S. 2,444,605 were used: In the 1st example, V gave the same results; in the 2nd example, VI gave the same results; in the 3rd example, 75 mg. VII substituted for 100 mg. V gave a fog d. of 0.1. In U.S. 2,444,608, the preparation of 1,3-bis(5-amino-1,3,4,1Htriazolyl)oxopropenes (VIII), where R is H or alkyl, R' is alkyl of the same value as R, aryl, or aralkyl, and R'' is either H, allyl, or alkyl of the same value as R, by condensing a β -keto ester or anilide thereof with a 5-amino-1,2,4,1H-triazole, and their use as stabilizers to prevent fog and increase stability are given. Suitable β -keto esters and anilides are, e.g., Et acetoacetate, Et toluylacetylacetanilide. Condensation is carried out by heating the reagents at 150-60° with C6H5NO2 for from 10 min. to 2 hrs. The final product either ppts. or is removed by diluting with an aromatic hydrocarbon, e.g., PhMe, or an oxygenated solvent, e.g., EtOH, and recrystd. from H2O. Instead of heating, the reactants may be allowed to stand in cold 5-20% aqueous NaOH or KOH for several days at room temperature, diluted with an equal volume of H2O, and warmed to redissolve the product. Cold glacial AcOH is added and, after chilling, the product is filtered, washed in cold H2O, and recrystd. from boiling H2O. The following 2-propen-1-ones have been prepared: 1,3-bis(5-amino-1,2,4,1H-triazol-1-yl)-3- methyl-2-allyl (IX); 1,3bis(5-amino-1,2,4,1H-triazol-1-yl)-3-methyl (X); 1,3-bis(5-amino-3-methyl-1,2,4,1H-triazol-1-yl)-3-methyl (XI); 1,3-bis(5-amino-3-methyl-1,2,4,1Htriazol-1-yl)-3-methyl-2-allyl; 1,3-bis(5-amino-1,2,4,1H-triazol-1-yl)-3phenyl; 1,3-bis(5-amino-1,2,4,1H- triazol-1-yl)-3-ethyl; 1,3-bis(5-amino-3propyl-1,2,4,1H-triazol-1-yl)-3- methyl; 1,3-bis(5-amino-3-ethyl-1,2,4,1Htriazol-1-yl)-2,3-dimethyl. The following examples illustrate the preparation of the compds.: Example 1. To 15 cc. C6H5NO2, 8.4 g. 5-amino-1,2,4,1Htriazole and 8.5 g. Et α -allylacetoacetate were added and the mixture was heated to 150-60° 1 hr., cooled to room temperature, and the product precipitated with Et20. The precipitate was washed with Et20 and recrystd. from H2O with charcoal. Example 2. 8.4 g. 5-amino-1,2,4,1H-triazole was dissolved in 15 cc. H2O, the mixture cooled to room temperature, and 13 g. ethyl acetoacetate added. After standing 15 min., a cold solution of 4 g. NaOH in 10 cc. H2O was added slowly with cooling to keep at room temperature After standing for 2 days, the mixture was diluted to 40 cc. and warmed to redissolve the precipitate, then 6 g. cold glacial AcOH added, and, after chilling, the product filtered, washed with H2O, and recrystd. from boiling H2O. Example 3. To 15 cc. C6H5NO2, 9.8 g. 5-amino-3-methyl-1,2,4,1H-triazole and 6.5 g. Et acetoacetate were added and the mixture was heated to 150160° 1 hr., cooled to room temperature, and the product isolated by diluting with Et20 and recrystg. from H2O. Example 4. Example 3 was repeated except that 96 g. Et benzoylacetate was substituted for 6.5 g. Et acetoacetate. By the same procedure as used in the 1st example of U.S. 2,444,605 in testing VIII as

stabilizers, IX had a fog d. of 0.06; an equivalent amount of X gave the same results; 75 mg. XI substituted for 100 mg. IX gave a fog d. of 0.1. Cf. preceding and following abstrs.

IT 856864-33-0P, s-Triazolo[1,5-a]pyrimidine, 7-amino-6-cyclohexyl-5-methyl-

RL: PREP (Preparation) (preparation of)

RN 856864-33-0 CAPLUS

CN s-Triazolo[1,5-a]pyrimidine, 7-amino-6-cyclohexyl-5-methyl- (5CI) (CA INDEX NAME)

=> d l2; d l7; d l11; d his; log y L2 HAS NO ANSWERS L1 STR

Structure attributes must be viewed using STN Express query preparation. L2 QUE ABB=ON PLU=ON L1

L7 HAS NO ANSWERS L6 STR

Structure attributes must be viewed using STN Express query preparation. L7 QUE ABB=ON PLU=ON L6

L11 HAS NO ANSWERS L10 STR

Structure attributes must be viewed using STN Express query preparation. L11 QUE ABB=ON PLU=ON L10

(FILE 'HOME' ENTERED AT 11:56:25 ON 18 JUN 2007)

FILE 'REGISTRY' ENTERED AT 11:56:37 ON 18 JUN 2007

L1 STRUCTURE UPLOADED

L2 QUE L1

L3 15 S L2

L4 244 S L2 FUL

FILE 'CAPLUS' ENTERED AT 11:57:07 ON 18 JUN 2007

L5 34 S L4

FILE 'REGISTRY' ENTERED AT 11:57:36 ON 18 JUN 2007

L6 STRUCTURE UPLOADED

L7 QUE L6

L8 12 S L7 SAM SUB=L4

185 S L7 FUL SUB=L4 L9 L9 L10 STRUCTURE UPLOADED QUE L10 L11 0 S L11 SAM SUB=L9 L12 7 S L11 FUL SUB=L9 L13 FILE 'CAPLUS' ENTERED AT 12:00:49 ON 18 JUN 2007 . L14 2 S L13 FILE 'MARPAT' ENTERED AT 12:01:46 ON 18 JUN 2007 0 S L13 1 S L13 FUL L15 L16 0 S L16 NOT L14 L17 COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 63.70 331.51 TOTAL DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE ENTRY SESSION CA SUBSCRIBER PRICE 0.00 -1.56 STN INTERNATIONAL LOGOFF AT 12:03:19 ON 18 JUN 2007

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S17	818293	amino	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/06/15 13:42
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S20		6-cycloalkyl S18	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON :	2007/06/15 13:43
S21	0	6-alkyl S18	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/06/15 13:43
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S23	2	"5961561".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/06/15 15:14
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S25	6189	phytopathogenic fungi	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/06/16 15:51
S26	73	pentafluoro and S25	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/06/16 15:52

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S27	1144	514/227.8.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/06/16 15:52
S28	346	S27 and pyrimidine	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/06/16 15:53
S29		S27 and blasco.in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/06/16 15:54
S30	380	514/384.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/06/18 09:07
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S32	4351	pentafluoro	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/06/18 09:07
S33	2	S30 S32	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND .	ON	2007/06/18 09:08

S34	308	fungal S32	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/06/18 09:08
S35	155	S34 pyrimidine	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/06/18 09:09